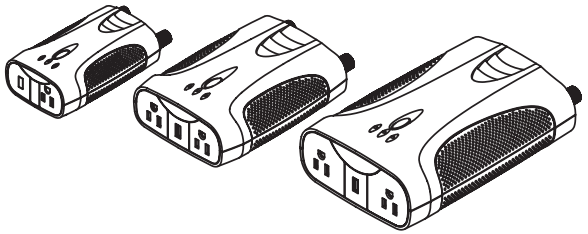
CyberPower®

AI Series Power Inverter User Guide



This guide contains important information regarding the safety, operation, maintenance, and storage of this product. Failure to read this guide and follow the directions could result in injury and/or property damage.

Important Safety Information

Before installing and using the *CyberPower AI series power inverter* please read the manual. Misusing or incorrectly connecting the Inverter may damage the equipment or create hazardous conditions for users. Read the following safety instructions and pay special attention to all ***CAUTION*** and ***WARNING*** statements in the manual.

- Do not operate the inverter near flammable materials, fumes, or gases.
- Always use the inverter where there is adequate ventilation. Do not obstruct the ventilation slots.
- Never immerse the unit in water or other liquids.
- Proper cooling is essential when operating the inverter. Refrain from placing the inverter near the vehicle's heat vent or in direct sunlight.
- Always turn the inverter off by removing it from the DC accessory socket when not in use.
- Check the warning labels on battery chargers or adapters before connecting them to the inverter. Do not connect battery chargers or adapters with warnings about using with inverters.

Introduction

Thank you for choosing the *CyberPower AI series power Inverter*. To enjoy all the features and benefits of Inverter, please read and follow all instructions completely.

The *CyberPower AI series power inverter* is a portable source of 110/120 volt AC power. The AC Power converts DC battery power from your vehicle into standard 110/120 volt AC power, allowing you to power most notebook computers, cell phone chargers, camcorders, and other electronic products drawing AC power.

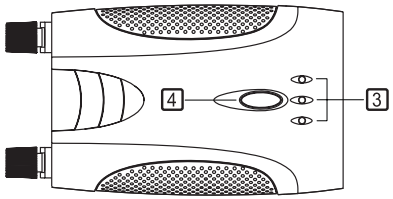
Package Contents

This product package includes:

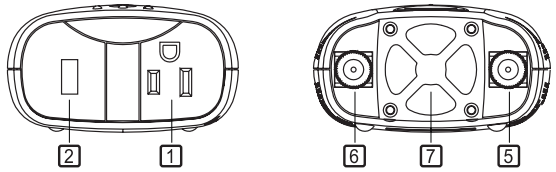
- AC Power Inverter
- Lighter Plug Cable (CPS200AI / CPS400AI only)
- Battery Clamp Cable
- Warranty Registration Card
- User Guide

Product Overview

AI Inverter Top View

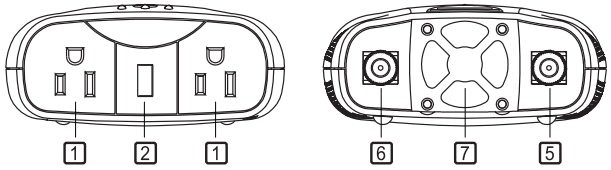


CPS200AI Inverter



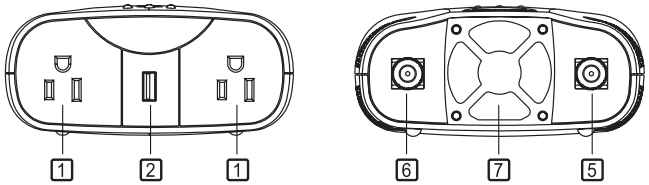
Front View Back View

CPS400AI Inverter



Front View Back View

CPS750AI Inverter



Front View Back View

Product Features

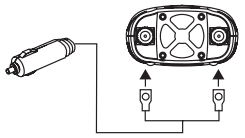
1. 110/120 volt AC outlet
2. USB charging port
3. LED indicator light
   [Power LED(Green), Input Fault (Yellow), Output Fault (Red)]
4. ON/OFF Push Button
5. DC Input positive terminal
6. DC Input negative terminal
7. Cooling Fan

Operation

1. Connecting the power cord for loads under 150 watts

Follow these steps to connect the Power Inverter :

1. Place the inverter on a flat surface in your vehicle floor.
2. Make sure the power switch on the top panel is off.
3. Take the power cord equipped with the lighter plug and place the ring terminals over the two cabling terminals on the back of the inverter.
4. Place the inverter lighter plug in the vehicle cigarette lighter socket.



CAUTION :
1. Connect the RED cable to the POSITIVE terminal of the inverter.
2. Connect the BLACK cable to the NEGATIVE terminal of the inverter.

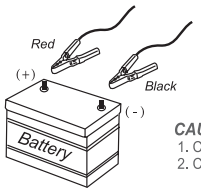
5. Turn on the power switch. The green light indicates that the inverter is operating normally and that AC power is available at the outlet.
6. Verify that the connected device(s) draws less than 150 watts and plug into the AC outlet.
7. Always turn the inverter off when not in use.

> ⚠ ***CAUTION*** Make sure you connect cable red to red and black to black, and make sure you screw the nuts on tightly.

2. Connecting the power cords for loads over 150 watts

Follow these steps to connect the Power Inverter :

1. Place the inverter on a flat surface.
2. Make sure the power switch on the top panel is off.
3. Take the power cord equipped with battery clamps on one end and place the ring terminals over the two cabling terminals on the back of the inverter.
4. Fasten the positive (red) clamp to the positive battery post, and then fasten the negative (black) clamp to the negative battery post.



CAUTION :
1. Connect the RED cable to the POSITIVE terminal of the battery.
2. Connect the BLACK cable to the NEGATIVE terminal of the battery.

5. Turn on the power switch. The green light indicates that the inverter is operating normally and that AC power is available at the outlet.
6. Take device power cord plug into the inverter AC outlet.
7. Always turn the inverter off when not in use.

> ⚠ ***CAUTION*** A reverse polarity connection (positive to negative) will blow a fuse in the inverter and may permanently damage the unit. Damage caused by a reverse polarity connection is not covered by your warranty.
>
> ⚠ ***WARNING*** Batteries contain corrosive materials and present an electrical shock hazard. To prevent irritation and burns, wear protective eyewear and clothing when you install the inverter or work with the batteries.Take special care to ensure that metal tools and personal metal objects like rings and bracelets do not contact the battery terminals.

Operating and Storage Tips

The inverter should only be operated under the following conditions:

Operating Tips

- Dry - Do not allow water or other liquids to come into contact with the inverter.
- Temperature - Ambient air temperature should be between 32°F - 86°F (0 °C - 30°C). Keep the inverter out of direct sunlight.
- Air Circulation - Keep the inverter's ventilation slots clear to ensure free air flow to the unit. Do not place any items on or over the inverter during operation. The unit will shut down if it overheats.

Storage Tips

- Proper storage temperature range is 50°F - 85°F (10°C - 28°C)
- Please store and use the inverter in a cool and dry place.
- Avoid exposing the inverter to heating elements, direct sunlight or high humidity.

DC Fuse Replacement (For Lighter Adapter)

The 200 and 400W inverter contains a fuse inside in the lighter adapter (see Figure 1) to protect the unit against overloading. If the inverter draws more than 150 watts, the internal fuse may open to protect the inverter, vehicle battery, and the connected equipment. To replace the fuse, please follow the instructions below:

1. Unplug the inverter from the power source.
2. Remove the contact retainer from the 12V DC adapter.
3. Replace the 15 amp fuse.
4. Reassemble the fuse, contact pin, and contact screw carefully.
5. Ensure all pieces shown in Figure 1 are installed in the correct sequence.

Note : For in-warranty units, the replacement fuse can be obtained from CyberPower Technical Support.

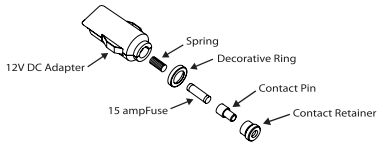


Figure 1. Fuse Replacement

Specifications

Model	CPS200AI	CPS400AI	CPS750AI
Output Power (continuous)	200 W	400W	750W
Output Power (Surge Peak)	400 W	800W	1500W
Output Voltage	120 Volts +/- 10%		
Output Frequency	60 Hz		
Output Waveform	Simulated Sine Wave		
Efficiency	> 85%		
Input Voltage	10.5 ~ 15.5 Vdc		
Low Voltage Alarm	10.5 Vdc		
Low Voltage Shutdown	10.5 Vdc		
Input Fuse (Internal)	25Amp	25Amp x2	40Amp x 2
Additional Protection	Overload, Overvoltage, Overheating, Short-circuit		
Dimensions (L x W x H) inch	5.59x3.66x1.96	6.14x4.72x2.04	7.68x5.28x2.36
Weight (lb)	0.66	1.1	1.76

Troubleshooting

Problem	*Possible Cause*	*Suggested Solutions*
No AC output - Yellow & Green LED lit	DC input is below 10.8Vdc	Recharge or replace the battery.
No AC output - Red & Green LED lit.	1. Short circuit. 2. Overload 3. Inverter hot.	1. Disconnect the load. 2. Reduce the load. 3. Disconnect the load and operate the inverter for a few minutes.
No AC output - Green LED not lit.	Bad connection or wiring	Tighten all DC connections.
Buzzer Alarm	Low battery or Hi battery voltage	Recharge battery or check your battery voltage.
Motorized power tool will not operate	Excessive startup load. If the start up load exceeds the inverters peak load capability it will not work.	Disconnect the load until the inverter operates normally and connect the load again.

Product Limited Warranty

CyberPower warrants the AI series Power Inverter to be free from defect in material or manufacture for two years. If a defect results in product failure during its normal use, CyberPower's sole responsibility is to repair or replace (as its sole option) the Inverter.

The foregoing Limited Warranty is the consumer's sole and exclusive remedy and excludes any incidental or consequential damages. Some States do not allow the exclusion or limitation of incidental and consequential damages, so certain of the above limitations or exclusions may not apply to you (the Consumer). This limited warranty gives the Consumer specific legal rights and the Consumer may have other rights, which vary from State to State.

To make a Limited Warranty claim:

1. Pack and ship the Inverter to CyberPower at 4241 12th Avenue East, Suite 400, Shakopee, MN 55379.
2. Clearly indicate on the outside of the packaging that this is a "WARRANTY RETURN"
3. Clearly include your name and address (a) on the outside packaging and (b) on a sheet of paper enclosed in the box with the Inverter that is being returned.
4. You MUST prepay all shipping costs and you are responsible for packaging and shipment for the return of the defective product.

Note Page

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